



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/698,823 | 10/31/2003 | Peter G. Hwang | 200206327-1 | 1286 |
| 22879 7590 03/09/2009 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400 | | | | |
| EXAMINER | | | | |
| LIANG, LEONARD S | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2853 | | | | |
| NOTIFICATION DATE | | DELIVERY MODE | | |
| 03/09/2009 | | ELECTRONIC | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM

mkraft@hp.com

ipa.mail@hp.com

Office Action Summary

Application No.

10/698,823

Applicant(s)

HWANG ET AL.

Examiner

LEONARD S. LIANG

Art Unit

2853

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2008 and 12 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-14, 19-25, 31-33 and 35-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-14, 19-25, 31-33, 35-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19, 39-44, and 46-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Egashira et al (US Pat 5567068).

Egashira et al discloses:

- {claim 19} An imaging apparatus (figure 3; abstract); a first media tray (figure 3, reference 36); a second media tray (figure 3, reference 31); a housing having an interior cavity portion therein (figure 3, reference 41); a print engine disposed in the interior cavity (figure 3, references 25a-e); means for allowing movement of the first media tray and the second media tray between a deployed position where at least a portion of the first media tray and the second media tray are positioned outside the interior cavity, and a stowed position where the first media tray and the second media tray are positioned within the interior cavity of the housing (figures 2A, 2B, 3; references 31 and 36); wherein one of the first media tray or the second media tray provides an input tray for the imaging apparatus, and the other of the first media tray or the second media tray provides an output tray for the imaging apparatus (figure 3, references 31 and 36);

wherein one of the second media tray or the first media tray is positioned over the other of the second media tray or the first media tray when the second media tray and the first media tray are in the deployed position (figure 3, references 31 and 36)

- {claim 39} A method (abstract); pivoting a lid of an imaging apparatus from a closed position to an open position to increase access to a first media tray and a second media tray (figure 3, reference 34); rotating each of the first media tray and the second media tray from a stowed position to a deployed position (figures 2A, 2B, 3, references 31 and 36); wherein one of the first media tray or the second media tray provides an input tray for the imaging apparatus, and the other of the first media tray or the second media tray provides an output tray for the imaging apparatus (figure 3, references 31 and 36); wherein one of the second media tray or the first media tray is positioned over the other of the second media tray or the first media tray when the second media tray and the first media tray are in the deployed position (figure 3, references 31 and 36)
- {claim 40} pivoting the lid of the imaging apparatus from the open position to the closed position while the first media tray and the second media tray are in the deployed position (figures 2A and 3, reference 34)
- {claim 41} operating the imaging apparatus with the lid in the closed position and the first media tray and the second media tray in the deployed position (figure 3, references 31, 36, 41)

- {claim 42} wherein operating the imaging apparatus with the lid in the closed position and the first media tray and the second media tray in the deployed position includes moving media onto one of the first media tray or the second media tray (figure 3, references 31, 36, 41; column 4, lines 25-40)
- {claim 43} wherein operating the imaging apparatus with the lid in the closed position and the first media tray and the second media tray in the deployed position includes removing media from one of the first media tray or the second media tray (figure 3, references 31, 36, 41; column 4, lines 25-40)
- {claim 44} further comprising a cover pivotally attached to the housing and configured to cover the interior cavity (figure 3, reference 41)
- {claim 46} wherein one of the second media tray or the first media tray nests over the other of the second media tray or the first media tray when the second media tray and the first media tray are in the stowed position (figure 3, references 31 and 36)
- {claim 47} wherein one of the second media tray or the first media tray nests over the other of the second media tray or the first media tray when the second media tray and the first media tray are in the stowed position (figure 3, references 31 and 36)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9-13, 31-33, 35-38, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Egashira et al (US Pat 5567068) in view of Kuelzer et al (US Pat 5426456).

Egashira et al discloses:

- {claim 1} An imaging apparatus (figure 3; abstract); a housing having an interior portion defining a cavity (figure 3, reference 41); a cover pivotally attached to the housing and configured to cover the cavity (figures 2A, 3, reference 34); a first media tray movably attached to the interior portion of the housing (figures 2A, 2B, 3, reference 36); a second media tray movably attached to the interior portion of the housing, wherein the second media tray and the first media tray are movable between a stowed position substantially within the cavity, and a deployed position substantially outside the cavity (figures 2B, 3, reference 31); wherein one of the first media tray or the second media tray provides an input tray for the imaging apparatus, and the other of the first media tray or the second media tray provides an output tray for the imaging apparatus (figure 3, references 31 and 36; column 4, lines 25-40); wherein one of the second media tray or the first media tray is positioned over the other of the second

media tray or the first media tray when the second media tray and the first media tray are in the deployed position (figure 3, references 31 and 36)

- {claim 2} wherein the second media tray is attached to the interior portion of the housing with a hinge (figure 2B, reference 31)
- {claim 3} wherein the first media tray is attached to the interior portion of the housing with a hinge (figures 2A, 2B, 3, reference 36)
- {claim 4} wherein the second media tray is attached to the interior portion of the housing with a first hinge, and the first media tray is attached to the interior portion of the housing with a second hinge (figures 2A, 2B, 3, references 31 and 36)
- {claim 5} further comprising a link pivotally attached to the interior portion of the housing with a third hinge, wherein one of the first media tray or the second media tray is attached to the interior portion of the housing with a first hinge, and the other of the first media tray or the second media tray is attached to the link with a second hinge (figure 2A, reference 36; see top portion hingedly attached to tray 36)
- {claim 6} wherein the second media tray is positioned near the first media tray when the first media tray and the second media tray are in the deployed position (figure 3, references 31 and 36)
- {claim 7} wherein the first media tray is positioned over the second media tray when the second media tray and the first media tray are in the deployed position (figure 3, references 31 and 36)

- {claim 9} wherein the second media tray and the first media tray are positioned substantially directly over each other when the second media tray and the first media tray are in the deployed position (figure 3, references 31 and 36)
- {claim 10} wherein the cover covers the interior portion of the housing when the second media tray and the first media tray are in the stowed position (naturally suggested by figures 2A, 3, reference 41)
- {claim 11} wherein the cover is movable between an open position and a closed position when the second media tray and the first media tray are in the deployed position (figure 3, reference 41)
- {claim 12} wherein the cover is movable between an open position and a closed position when the second media tray and the first media tray are in the stowed position (figure 3, reference 41)
- {claim 13} wherein the housing includes a first side and a second side, wherein the second media tray and the first media tray are both positioned on one of the first side or the second side when the second media tray and the first media tray are in the deployed position (figure 3, references 31 and 36)
- {claim 31} An imaging apparatus (figure 3); a housing having an interior cavity (figure 3, reference 41); wherein one of the first media tray or the second media tray provides an input tray for the imaging apparatus, and the other of the first media tray or the second media tray provides an

output tray for the imaging apparatus (figure 3, reference 31, 36); wherein one of the first media tray or the second media tray has a portion forming an exterior surface of the housing when in a stowed position (figures 2B, 3, reference 36)

- {claim 32} wherein the first media tray and the second media tray are disposed within the interior cavity when in a stowed position (figure 2A, 2B, 3, references 31, 36)
- {claim 33} further comprising a cover pivotally attached to the housing capable of substantially covering the interior cavity (figure 3, reference 41)
- {claim 35} further comprising a cover pivotally attached to the housing capable of substantially covering the interior cavity (figure 3, reference 41)
- {claim 36} wherein one of the first media tray or the second media tray has at least a portion disposed within the interior cavity of the housing (figures 2A, 2B, 3, reference 31, 36)
- {claim 37} wherein the first media tray and the second media tray are disposed within the interior cavity when in a stowed position (figures 2A, 2B, 3, references 31, 36)
- {claim 38} An imaging apparatus (figure 3); a housing having an interior cavity (figure 3, reference 41); a first media tray and a second media tray each being at least partially disposed within the interior cavity (figure 3, references 31 and 36); wherein one of the first media tray or the second media tray provides an input tray for the imaging apparatus, and the other

of the first media tray or the second media tray provides an output tray for the imaging apparatus (figure 3, references 31 and 36); wherein one of the first media tray or the second media tray has a portion forming an exterior surface of the housing when in a stowed position (figures 2A and 3, reference 36)

- {claim 45} wherein one of the second media tray or the first media tray nests over the other of the second media tray or the first media tray when the second media tray and the first media tray are in the stowed position (figure 3, references 31 and 36)

Egashira et al differs from the claimed invention in that it does not disclose:

- {claim 1} a carriage and a carriage rod disposed within the cavity
- {claim 31} a carriage rod disposed within the interior cavity; a carriage disposed within the interior cavity and movable along a length of the carriage rod through a length of travel within the interior cavity; a carriage swept volume, wherein the swept volume is the profile of the carriage extended along the length of the carriage rod a distance equal to the length of travel of the carriage; a first media tray and a second media tray each being at least partially disposed within the carriage swept volume

Kuelzer et al discloses:

- {claim 1} a carriage and a carriage rod disposed within the cavity (figure 1, reference 7; column 1, lines 28-34; column 7, lines 50-52)

- {claim 31} a carriage rod disposed within the interior cavity (figure 1, reference 70); a carriage disposed within the interior cavity and movable along a length of the carriage rod through a length of travel within the interior cavity (figure 1, reference 7); a carriage swept volume, wherein the swept volume is the profile of the carriage extended along the length of the carriage rod a distance equal to the length of travel of the carriage (figure 1, reference 7); a first media tray and a second media tray each being at least partially disposed within the carriage swept volume (naturally suggested by combination with Egashira et al)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Kuelzer et al into the invention of Egashira et al. The motivation for the skilled artisan in doing so is to gain the benefit of using a low cost printing method like ink jet printing to form images.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Egashira et al (US Pat 5567068) in view of Kuelzer et al (US Pat 5426456), as applied to claim 1 above, and further in view of Khormaei et al (US PgPub 20030081101).

Egashira et al, as modified, teaches all limitations of the claimed invention except for the following:

- {claim 14} the other of the second media tray or the first media tray further comprising a slidably engaged extension member

Khormaei et al discloses:

- {claim 14} a slidably engaged extension member (figures 1, 4, 7, reference 17)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Khormaei et al into the invention of modified Egashira et al. The motivation for the skilled artisan in doing so is to gain the benefit of allowing for storage of greater sized media.

Claims 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Egashira et al (US Pat 5567068) in view of Khormaei et al (US PgPub 20030081101).

Egashira et al discloses:

- {claim 20} an imaging apparatus (as applied to claim 19 above); a first hinge positioned near one end of the at least one of the first media tray and the second media tray and attached to the interior cavity of the housing (figure 3, reference 31); a second hinge for allowing a first portion of at least one of the first media tray and the second media tray to fold with respect to a second portion of the at least one of the first media tray and the second media tray (figure 2A, reference 36; see two portions)
- {claim 21} wherein means for allowing movement of the first media tray and the second media tray further includes a third hinge positioned near one of the other of the at least one of the first media tray and the second media tray and attached to the interior cavity of the housing (figure 2A, reference 36)

- {claim 22} A method for moving a first media tray and a second media tray from a stowed position to a deployed position (figure 2A, 2B, 3, references 31, 36); opening a lid that covers at least an interior cavity in a housing (figure 3, reference 41); rotating a first media tray pivotally connected within the interior cavity of the housing from a stowed position substantially within the cavity of the housing to a deployed position where the first media tray is substantially outside the cavity of the housing (figure 3, reference 31); rotating a second media tray pivotally connected within the interior cavity of the housing from a stowed position substantially within the cavity of the housing to a deployed position where the second media tray is substantially outside the cavity of the housing (figure 3, reference 36); rotating a first portion of the second media tray with respect to a second portion of the second media tray, wherein the second portion of the media tray is rotatably attached to the interior cavity of the housing near one end of the second portion and wherein the second portion is rotatably attached to the first portion of the second media tray at the other end of the second portion (figure 3, reference 36); wherein one of the first media tray or the second media tray provides an input tray, and the other of the first media tray or the second media tray provides an output tray (figure 3, references 31, 36)
- {claim 23} wherein the first media tray is placed below the second media tray, the method further comprising presenting media in the second media

tray such that the media substantially covers the first media tray and the second media tray (figure 3, references 31, 36)

Egashira et al differs from the claimed invention in that it does not disclose:

- {claim 20} a slideable portion for allowing a third portion of the at least one of the first media tray and the second media tray to slide with respect to another portion of the at least one of the first media tray and the second media tray
- {claim 22} sliding a third portion of the second media tray with respect to the second portion of the second media tray
- {claim 24} further comprising positioning a paper stop near the end of the second media tray

Khormaei et al discloses:

- {claim 20} a slideable portion for allowing a third portion of the at least one of the first media tray and the second media tray to slide with respect to another portion of the at least one of the first media tray and the second media tray (figures 1, 4, 7, reference 17)
- {claim 22} sliding a third portion of the second media tray with respect to the second portion of the second media tray (figures 1, 4, 7, reference 17)
- {claim 24} further comprising positioning a paper stop near the end of the second media tray (figure 1, reference 22)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Khormaei et al into the invention of

Egashira et al. The motivation for the skilled artisan in doing so is to gain the benefit of allowing for storage of greater sized media.

Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Egashira et al (US Pat 5567068) in view of Khormaei et al (US PgPub 20030081101), as applied to claim 24 above, and further in view of Ohata et al (US Pat 5217215).

Egashira et al, as modified, teaches all limitations of the claimed invention except for the following:

- {claim 25} wherein positioning a paper stop near the end of the second media tray includes rotating a fourth position of the second media tray with respect to a third position of the second media tray

Ohata et al discloses:

- {claim 25} wherein positioning a paper stop near the end of the second media tray includes rotating a fourth position of the second media tray with respect to a third position of the second media tray (figure 4A-B, reference 40; Ohata et al shows rotatable paper stop)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Ohata et al into the invention of Egashira et al. The motivation for the skilled artisan in doing so is to gain the benefit of adjusting media handling depending on the size of the sheet.

Response to Arguments

Applicant's arguments with respect to claims 1-7, 9-14, 19-25, 31-33, and 35-47 have been considered but are moot in view of the new ground(s) of rejection. Upon further consideration and a new search, the examiner decided that the above rejection should have been applied to the previously allowed claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD S. LIANG whose telephone number is (571)272-2148. The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/698,823
Art Unit: 2853

Page 16

/L. S. L./
Examiner, Art Unit 2853
02/27/09

/Stephen D Meier/
Supervisory Patent Examiner, Art Unit 2853